Filed: February 17, 2006

Art Unit: 3752

**IN THE CLAIMS:** 

The presently pending claims are presented below:

1. (Previously presented) A method for fire-fighting, the method comprising:

piercing a shell of a burning object by pushing at least one elongated piercing tool

arranged in a rescue boom from the side of a first surface of the shell to the side of a second

surface thereof,

feeding, along at least one longitudinal channel in the piercing tool, a fire extinguishing

medium to a nozzle provided in the piercing tool,

spraying the fire extinguishing medium to the side of the second surface of the shell

through a plurality of orifices provided in the nozzle,

and directing a plurality of single jets expelled from the orifices so that they intersect one

another to form a single uniform jet having a flat curtain-like shape.

2. (Previously presented) A method as claimed in claim 1, comprising

using said jet in order to confine a seat of fire.

3. (Previously presented) A method as claimed in claim 1, comprising

turning the nozzle around the longitudinal axis of the piercing tool in order to turn the

curtain-like jet.

4. (Previously presented) A method as claimed in claim 1, comprising

turning the piercing tool around its longitudinal axis in order to turn the curtain-like jet.

Filed: February 17, 2006

Art Unit: 3752

5. (Previously presented) A rescue boom comprising:

a boom provided with at least one movable boom part connected to a base,

at least one piercing tool arranged at a free end of the boom, the piercing tool being an

elongated piece comprising at least one longitudinal channel,

at least one actuator for moving the piercing tool in the longitudinal direction of the

piercing tool with respect to an outermost end of the boom,

at least one feed channel for feeding a fire extinguishing medium to the channel in the

piercing tool,

at least one nozzle, which is an elongated piece and which is connected to the channel in

the piercing tool, the fire extinguishing medium being arranged to be fed through a plurality of

orifices provided in the nozzle,

and wherein the longitudinal cross section of the nozzle, the orifices in the nozzle are

arranged to pass via substantially the same imaginary plane so that the fire extinguishing medium

fed through the orifices forms a plurality of single jets which intersect one another to form a

single uniform jet having a flat curtain-like shape.

6. (Previously presented) A rescue boom as claimed in claim 5, wherein

means are provided in connection with the piercing tool for turning the curtain-like jet

expelled from the nozzle with respect to the longitudinal axis of the piercing tool.

(Previously presented) A nozzle of a piercing tool for spraying a fire

extinguishing medium, the nozzle being an elongated piece having a front end and a rear end and

the nozzle comprising:

7.

fastening means at the rear end of the nozzle for fastening the nozzle to the piercing tool,

Filed: February 17, 2006

Art Unit: 3752

at least one feed channel for feeding a fire extinguishing medium to the nozzle,

a plurality of orifices extending from the feed channel to an outer surface of the nozzle,

the orifices being directed obliquely forwards such that the farther away from the front end of the

nozzle a single orifice resides, the larger an acute angle between the middle axis of the orifice

and the middle axis of the nozzle

and wherein the longitudinal cross section of the nozzle, the orifices are arranged to pass

via substantially the same imaginary plane so that the fire extinguishing medium fed through the

orifices forms a plurality of single jets which intersect one another to form a single uniform jet

having a flat curtain-like shape.

8. (Previously presented) A nozzle as claimed in claim 7, wherein

the cross section of the single orifices in the nozzle is dimensioned to be the larger the

smaller the angle between the middle axis of the orifice and the middle axis of the nozzle so that

the curtain-like jet is arranged to extend to a larger distance at the front of the nozzle than on the

sides of the nozzle.

9. (Previously presented) A nozzle as claimed in claim 7, wherein

the nozzle is a sleeve-like piece,

and the front end of the nozzle is provided with connecting means for fastening a separate

tip piece.

10. (Previously presented) A nozzle as claimed in claim 7, wherein

in the longitudinal cross section of the nozzle, the orifices are arranged successively in a

first line of orifices and in a second line of orifices, and

Filed: February 17, 2006

Art Unit: 3752

the first line of orifices resides on a first side of the middle axis of the nozzle while the

second line of orifices resides on a second side of the middle axis thereof so that the nozzle is

arranged to form a uniform, curtain-like jet extending to the sides and to the front of the nozzle.

11. (Previously presented) A nozzle as claimed in claim 7, wherein

in the longitudinal cross section of the nozzle, the orifices are arranged successively in a

first line of orifices and in a second line of orifices,

and the first line of orifices resides on a first side of the middle axis of the nozzle while

the second line of orifices resides on a second side of the middle axis thereof so that the nozzle is

arranged to form a uniform, curtain-like jet extending to the sides and to the front of the nozzle,

and the outer surface of the nozzle is provided with at least one longitudinal groove at the

first line of orifices and at least one longitudinal groove at the second line of orifices.

12. (Previously presented) A nozzle as claimed in claim 7, wherein

in the longitudinal cross section of the nozzle, the orifices are arranged successively in a

first line of orifices and in a second line of orifices,

and the first line of orifices resides on a first side of the middle axis of the nozzle while

the second line of orifices resides on a second side of the middle axis thereof so that the nozzle is

arranged to form a uniform, curtain-like jet extending to the sides and to the front of the nozzle,

and the outer surface of the nozzle is provided with at least one longitudinal groove at the

first line of orifices and at least one longitudinal groove at the second line of orifices,

and two longitudinal grooves are provided successively both at the first line of orifices

and at the second line of orifices.

Filed: February 17, 2006

Art Unit: 3752

and as seen from the front end of the nozzle, the first grooves extend to a section of the

first orifices as seen from the front end of the nozzle only.

13. (Previously presented) A nozzle as claimed in claim 7, wherein

in the longitudinal cross section of the nozzle, the orifices are arranged successively in a

first line of orifices and in a second line of orifices,

and the first line of orifices resides on a first side of the middle axis of the nozzle while

the second line of orifices resides on a second side of the middle axis thereof so that the nozzle is

arranged to form a uniform, curtain-like jet extending to the sides and to the front of the nozzle,

and the outer surface of the nozzle is provided with at least one longitudinal groove at the

first line of orifices and at least one longitudinal groove at the second line of orifices,

and the shape of the bottoms of the grooves in the outer surface of the nozzle is inwardly

curved.

14. (Previously presented) A method as claimed in claim 1, further comprising the

step of extending a curtain-like flat jet to the front of the piercing tool.

15. (Previously presented) A rescue boom as claimed in claim 5, wherein the orifices

of the nozzle are directed obliquely forward.

C